

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 26 SEP 2005

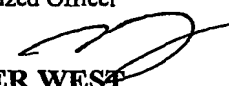
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Applicant's or agent's file reference 504908 GWW	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/NZ2004/000118	International filing date (day/month/year) 9 June 2004	Priority date (day/month/year) 9 June 2003
International Patent Classification (IPC) or national classification and IPC Int. Cl. ⁷ A63B 5/11		
Applicant BOARD & BATTEN INTERNATIONAL INC, et al		

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 4 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
 - ☒ (sent to the applicant and to the International Bureau) a total of 7 sheets, as follows:
 - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or table related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
- This report contains indications relating to the following items:

<input checked="" type="checkbox"/> Box No. I	Basis of the report
<input type="checkbox"/> Box No. II	Priority
<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/> Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/> Box No. VI	Certain documents cited
<input type="checkbox"/> Box No. VII	Certain defects in the international application
<input checked="" type="checkbox"/> Box No. VIII	Certain observations on the international application

Date of submission of the demand 7 March 2005	Date of completion of the report 19 September 2005
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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/NZ2004/000118

Box No. I

Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:

☐ international search (under Rules 12.3 and 23.1 (b))

☐ publication of the international application (under Rule 12.4)

☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☐ the international application as originally filed/furnished

☒ the description:

pages 1 to 11 as originally filed/furnished

pages* received by this Authority on with the letter of

pages* received by this Authority on with the letter of

☒ the claims:

pages as originally filed/furnished

pages* as amended (together with any statement) under Article 19

pages* 12 to 18 received by this Authority on 15 July 2005 with the letter of 15 July 2005

pages* received by this Authority on with the letter of

☒ the drawings:

pages 1 to 11 as originally filed/furnished

pages* received by this Authority on with the letter of

pages* received by this Authority on with the letter of

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages

☐ the claims, Nos.

☐ the drawings, sheets/figs

☐ the sequence listing (*specify*):

☐ any table(s) related to the sequence listing (*specify*):

☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages

☐ the claims, Nos.

☐ the drawings, sheets/figs

☐ the sequence listing (*specify*):

☐ any table(s) related to the sequence listing (*specify*):

If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/NZ2004/000118

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims 1 to 35	YES
	Claims	NO
Inventive step (IS)	Claims	YES
	Claims 1 to 35	NO
Industrial applicability (IA)	Claims 1 to 35	YES
	Claims	NO

2. Citations and explanations (Rule 70.7)

The following documents identified in the International Search Report have been considered for the purposes of this report:

D1 WO 2003/043704 A1 (CANTERPRISE LIMITED) 30 May 2003
D2 US 6319174 B1 (ALEXANDER) 20 November 2001
D3 US 5941798 A (COAN et al.) 24 August 1999
D4 US 6053845 A (PUBLICOVER et al.) 25 April 2000

Novelty (N)

None of the above cited documents disclose all the features of independent claims 1, 14, 21 or 30 in their entirety and therefore claim 1 is novel. Appended claims 2 to 13, 15 to 20, 22 to 29 and 31 to 35 add further features to those defined in claim 1 and are therefore also novel.

Therefore the subject matter of claims 1 to 35 is new and meets the requirements of Article 33(2) PCT with regard to novelty.

Inventive Step (IS)

Safety nets for trampolines are well known and a large variety of designs and construction materials are known in the art. It is considered that it would be obvious for a person skilled in the art to adapt a tensioned safety net for a conventional trampoline such as disclosed in D4 (see in particular column 13 lines 30 to 67) to a trampoline having a mat supported by resiliently flexible rods as disclosed in either of D1 or D2.

Therefore it is considered that amended claims 1 (see also Box No. VIII) and 14 lack an inventive step when either of D1 or D2 are read in the light of D3.

Furthermore it is considered that the features added by appended claims 2 to 13 and 15 to 35 relate to arrangements that are merely matters of design choice when the general technical knowledge about the state of the art is used and hence do not contribute to providing a patentable inventive step.

Therefore the subject matter of all of claims 1 to 35 is obvious and does not meet the requirements of Article 33(3) PCT with regard inventive step.

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

1. Claim 1 is not clear and does not define the invention described in that it is not defined by what means, or to what, the upright enclosure members are retained at or towards their lower ends. It would appear from a reading of the specification as a whole that it is an essential feature of the invention that the upright enclosure members are retained by the base frame of the trampoline.
2. From a reading of the specification as a whole it would appear that the invention resides in the following specific combination of features;
 - a flexible mat;
 - a plurality of resiliently flexible spring rods each extending between a base frame of the trampoline the periphery of the mat;
 - a barrier of flexible material surrounding the mat above the mat and having a lower peripheral part connected to the mat;
 - a plurality of resiliently flexible upright enclosure support members to support the barrier above the mat;
 - the enclosure support members are outside the barrier relative to the mat;
 - the enclosure support member are connected to the trampoline only at their lower ends and connected at their upper ends to an upper peripheral part of the barrier;
 - the enclosure support members are retained by the frame of the trampoline below the level of the mat and are connected to the frame so that in their natural rest state they extend away from the mat; and,
 - the barrier has a flexible connecting element at its upper peripheral part which connects the upper ends of enclosure support members and which is in tension so it that draws the upper ends of the enclosure support members away from their natural rest state and towards the centre of the mat.However none of the independent claims define this combination of features but variously include and omit these and other features. It is noted that each independent claim must define all the characterising features on the invention. Therefore claims 1, 14, 21 and 21 lack descriptive support because they each do not define the invention described.

WHAT WE CLAIM IS:

1. A trampoline and enclosure system including:
a flexible mat;
a plurality of resiliently flexible spring rods each having a lower end retained by a frame of the trampoline and an upper end coupled to the mat about a periphery of the mat;
a barrier of a flexible material surrounding the mat above the mat and having a lower peripheral part coupled directly or indirectly to the mat; and
a plurality of generally upright enclosure support members outside of the barrier relative to the mat which are resiliently flexible over at least the major part of the lengths thereof and which are retained at or towards the lower ends of the enclosure support members and which support the net above the mat, which are free to deform away from the mat when impacted by a user against an enclosure support member and/or against said barrier of flexible material, the barrier connecting together the enclosure support members at or towards an upper peripheral edge part of the barrier and at or towards the upper ends of the enclosure members so that at least said upper peripheral part of the net is in tension and so that such resilient deformation of one of the enclosure support members away from the mat causes resilient deformation of opposite enclosure support members towards the mat.
2. A trampoline and enclosure system according to claim 1, wherein said barrier comprises a flexible net material.
3. A trampoline and enclosure system according to either of claims 1 and 2 wherein the enclosure support members are resiliently flexible rods.
4. A trampoline and enclosure system according to any one of claims 1 to 3, wherein the enclosure support members are pultruded fibreglass rods.
5. A trampoline and enclosure system according to any one of claims 1 to 4 wherein the barrier is supported by the enclosure support members by connections

between the barrier at or towards an upper peripheral edge part of the barrier and the enclosure support members at or towards the upper ends of the enclosure support members which draw the upper ends of the enclosure support members away from their natural rest state (when connected only at their lower ends to the frame of the trampoline), and towards the centre of the mat.

6. A trampoline and enclosure system according to any one of claims 1 to 4 including a flexible connecting element which connects the enclosure support members at or towards the upper ends of the enclosure support members to draw the upper ends of the enclosure support members away from their natural rest state (when connected only at their lower ends to the frame of the trampoline), and towards the centre of the mat.

7. A trampoline and enclosure system according to claim 6 wherein said flexible connecting element is fixed to or integral with the barrier at or towards an upper peripheral part of the barrier.

8. A trampoline and enclosure system according to any one of claims 1 to 7, wherein the enclosure support members are retained by the frame of the trampoline at about the level on the frame of the trampoline at which the lower ends of the flexible spring rods are also retained by the frame of the trampoline.

9. A trampoline and enclosure system according to any one of claims 1 to 8 wherein the lower ends of the enclosure support members are retained by the frame of the trampoline so that in their natural rest state (when connected only at the lower ends to the frame of the trampoline) the enclosure support members extend away from the mat.

10. A trampoline and enclosure system according to any one of claims 1 to 9 wherein the barrier includes a series of pockets on an outside of the barrier which engage over upper ends of the enclosure support members.

11. A trampoline and enclosure system according to claim 10 wherein said pockets are at least half the length of the enclosure support members.
12. A trampoline and enclosure system according to either of claims 10 and 11 wherein the enclosure support members each comprise an enlarged upper end.
13. A trampoline and enclosure system according to any one of claims 1 to 12 wherein the upper ends of the flexible spring rods pass through a lower peripheral section of the barrier below the mat to couple the barrier to the mat.
14. A trampoline and enclosure system including:
 - a flexible mat;
 - a plurality of resiliently flexible spring rods each extending between a base frame of the trampoline and a periphery of the mat;
 - a barrier of a flexible material surrounding the mat above the mat and having a lower peripheral part coupled directly or indirectly to the mat; and a plurality of enclosure support rods coupled to the trampoline only by a lower end of each enclosure support rod being retained by the base frame of the trampoline, and which extend above the mat to support the net above the mat, and which are each resiliently flexible over substantially the entire length thereof and which are the barrier connecting together the enclosure support members at or towards an upper peripheral edge part of the barrier and at or towards the upper ends of the enclosure members so that at least said upper peripheral part of the net is in tension and so that such resilient deformation of one of the enclosure support members away from the mat causes resilient deformation of opposite enclosure support members towards the mat.
15. A trampoline and enclosure system according to claim 14, wherein said barrier comprises a flexible net material.
16. A trampoline and enclosure system according to either of claims 14 and 15, wherein the enclosure support rods are pultruded fibreglass rods.

17. A trampoline and enclosure system according to any one of claims 14 to 16 wherein the barrier is supported by the enclosure support rods by connections between the barrier at or towards an upper peripheral edge part of the barrier and the enclosure support rods at or towards the upper ends of the enclosure support rods which draw the upper ends of the enclosure support rods away from their natural rest state (when connected only at their lower ends to the frame of the trampoline), and towards the centre of the mat.
18. A trampoline and enclosure system according to any one of claims 14 to 16 including a flexible connecting element which connects the enclosure support rods at or towards the upper ends of the enclosure support rods to draw the upper ends of the enclosure support rods away from their natural rest state (when connected only at their lower ends to the frame of the trampoline), and towards the centre of the mat.
19. A trampoline and enclosure system according to any one of claims 14 to 18, wherein the enclosure support rods are retained by the frame of the trampoline at about the level on the frame of the trampoline at which the lower ends of the flexible spring rods are also retained by the frame of the trampoline.
20. A trampoline and enclosure system according to any one of claims 14 to 19 wherein the lower ends of the enclosure support rods are retained by the frame of the trampoline so that the natural rest state (when connected only at the lower ends to the frame of the trampoline) the enclosure support rods extend away from the mat.
21. A trampoline and enclosure system including:
 - a flexible mat;
 - a plurality of resiliently flexible spring rods each having a lower end retained by a frame of the trampoline and an upper end coupled to the mat about a periphery of the mat;
 - a barrier of a flexible material surrounding the mat above the mat and having a lower peripheral part coupled directly or indirectly to the mat; and

a plurality of resiliently flexible generally upright enclosure support members outside of the barrier relative to the mat and which are retained at or towards the lower ends of the enclosure support members by the frame of the trampoline and which support the barrier above the mat, which enclosure support members are connected together at or towards the upper ends of the enclosure support members to draw the upper ends of the enclosure support members away from their natural rest state (when connected only at their lower ends to the frame of the trampoline), and towards the centre of the mat to tension the barrier.

22. A trampoline and enclosure system according to claim 21, wherein said barrier comprises a flexible net material.
23. A trampoline and enclosure system according to either of claims 21 and 22 wherein the enclosure support members are resiliently flexible rods.
24. A trampoline and enclosure system according to any one of claims 21 to 23, wherein the enclosure support members are pultruded fibreglass rods.
25. A trampoline and enclosure system according to any one of claims 21 to 24 wherein the barrier is supported by the enclosure support members by connections between the barrier only at or towards an upper peripheral edge part of the barrier and the enclosure support members.
26. A trampoline and enclosure system according to any one of claims 21 to 24 including a flexible connecting element which connects the enclosure support members at or towards the upper ends of the enclosure support members.
27. A trampoline and enclosure system according to claim 26 wherein said flexible connecting element is fixed to or integral with the barrier at or towards an upper peripheral part of the barrier.

28. A trampoline and enclosure system according to any one of claims 21 to 27, wherein the enclosure support members are retained by the frame of the trampoline at about the level on the frame of the trampoline at which the lower ends of the flexible spring rods are also retained by the frame of the trampoline.
29. A trampoline and enclosure system according to any one of claims 21 to 28 wherein the lower ends of the enclosure support members are retained by the frame of the trampoline so that in their natural rest state (when connected only at the lower ends to the frame of the trampoline) the enclosure support members extend away from the mat.
30. A trampoline and enclosure system including:
a flexible mat;
a plurality of resiliently flexible spring rods each having a lower end retained by a frame of the trampoline and an upper end coupled to the mat about a periphery of the mat;
a plurality of resiliently flexible generally upright enclosure support members retained at or towards the lower ends of the enclosure support members by the frame of the trampoline and which are connected together at or towards the upper ends of the enclosure support members to draw the upper ends of the enclosure support members away from their natural rest state (when connected only at their lower ends to the frame of the trampoline) and towards the centre of the mat so that the area bounded by the upper ends of the enclosure support members is not greater than the area of the mat; and
a barrier of a flexible material surrounding the mat above the mat and within the enclosure support members and supported above the mat in tension by the enclosure support members.
31. A trampoline and enclosure system according to claim 30, wherein said barrier comprises a flexible net material.
32. A trampoline and enclosure system according to either of claims 30 and 31 wherein the enclosure support members are resiliently flexible rods.

33. A trampoline and enclosure system according to any one of claims 30 to 32, wherein the enclosure support members are pultruded fibreglass rods.

34. A trampoline and enclosure system according to any one of claims 30 to 33 wherein the barrier is supported by the enclosure support members by connections between the barrier only at or towards an upper peripheral edge part of the barrier and the enclosure support members.

35. A trampoline and enclosure system according to any one of claims 30 to 34 wherein the lower ends of the enclosure support members are retained by the frame of the trampoline so that in their natural rest state (when connected only at the lower ends to the frame of the trampoline) the enclosure support members extend away from the mat.